

a3

hydrocarbons and insoluble in an aqueous solution,
said additive comprising iodine.

REMARKS/ARGUMENTS

Claims 1 - 7 were pending in this application prior to this amendment. Claims 1 - 7 were rejected in the Office Action. Applicant has canceled claim 5, amended claims 1, 6 and 7 and added new claims 8 - 21. No new matter has been introduced. Reconsideration of claims 1 to 4, 6 and 7 and allowance of claims 1 to 4 and 6 to 21 is hereby respectfully requested.

Claim Rejections - 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1-4, 6 and 7 as being anticipated by Pye (3711405) and Gallus (3601194), claims 1-3 and 5-7 as being anticipated by Dill (3724549) and claims 1-3 and 7 as being anticipated by Hower (2803306).

Applicants have limited independent claims 1 and 8 by the following feature of claim 5 according to which the additive comprises:

...terpene- or sterol-based components...

Claim 5 has been rejected by the Examiner as being anticipated by Dill.

According to the Examiner, Dill teaches in particular a composition comprising a dicyclopentadiene (terpene) resin.

Terpenes are hydrocarbons built up from isoprene. Dicyclopentadiene is not built up from isoprene. It is neither a terpene nor a terpene-based component. Therefore, it is submitted that the invention claimed in claims 1 and 7 is not anticipated by Dill.

Dill does not suggest an additive comprising terpene- or sterol-based components. Therefore, it is submitted that the invention claimed in claims 1 and 7 also distinguishes over Dill.

Dill teaches that dicyclopentadiene forms a resin. It is understood that this resin is a polymeric resin whereas, according to the invention, the terpene- or sterol-based components form crystalline particles. In the resin particles of Dill, dicyclopentadiene molecules are linked by covalent bonds and over dicyclopentadiene melting point, the resin degrades to a fluid containing polymeric molecules which should be viscous whereas the crystalline particles of the invention degrades to a fluid with a low viscosity.

Claims 2 to 4, 6 and 8 to 20 are dependent either upon claim 1 or upon claim 7 and are therefore either not anticipated by nor rendered obvious at least for the same reasons as stated with respect to claims 1 and 7.

New independent claim 21 relates to a crystalline additive comprising iodine. This is not taught or suggested by the cited documents as well.

CONCLUSION

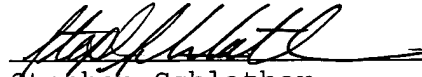
In light of the above amendments and remarks, the Applicants believe that the present application and

claims 1-4 and 6-21 are in proper condition for allowance. Such allowance is hereby requested.

Attached hereto is a marked-up version of the claims captioned "Version with markings to show changes made".

The Commissioner is authorized to charge Deposit Account No. 04-1579(57.0329) in the amount of any applicable fees.

Respectfully submitted,


Stephen Schlather
Reg. No. 45,081
Attorney for Applicants

Date: 3-21-2002
Schlumberger Technology Corporation
IP Dept. Well Stimulation
110 Schlumberger Drive, MD1
Ph: 281-285-4524
Fax: 281-285-8569

VERSION WITH MARKINGS TO SHOW THE CHANGES MADE

Claims 1, 6 and 7 have been amended as follows:

1. (Amended) A wellbore service fluid to be injected from a surface location through a well tubular into a subterranean formation, said fluid being water based and comprising a particulate additive having the properties of being crystalline, soluble in hydrocarbons and insoluble in an aqueous solution, said additive comprising terpene- or sterol-based components.

6. (Amended) The wellbore fluid of claim 1, wherein the crystalline additive, soluble in hydrocarbons and insoluble in an aqueous solution, comprises a wax.

7. (Amended) Method of treating a wellbore, including the steps injecting from the surface a water based wellbore fluid comprising a particulate additive having the properties of being crystalline, soluble in hydrocarbons and insoluble in an aqueous solution, said additive comprising terpene- or sterol-based components;
 letting said additive accumulate at the face of a permeable formation;
 reversing the flow direction and letting hydrocarbons enter said wellbore through said formation thereby dissolving at least part of said accumulated additive.

Claims 8 to 21 have been added as follows:

8. (New) Method of claim 7 wherein the additive has a molecular weight of less than 1000.

9. (New) Method of claim 8 wherein the additive has a molecular weight of less than 650.
10. (New) Method of claim 7 further comprising the step of encapsulating the additive prior to use in said wellbore fluid.
11. (New) Method of claim 7 wherein the melting point of the additive is over 80°C.
12. (New) Method of claim 11 wherein the melting point of the additive is over 100°C.
13. (New) Method of claim 7 wherein the size range of the particulate additive is comprised between 1 and 10000 microns.
14. (New) Method of claim 7 wherein the additive comprises terpene-based components.
15. (New) Method of claim 14 wherein the additive comprises Borneol or Camphor.
16. (New) The wellbore fluid of claim 1 wherein the melting point of the additive is over 80°C.
17. (New) The wellbore fluid of claim 16 wherein the melting point of the additive is over 100°C.
18. (New) The wellbore fluid of claim 1 wherein the size range of the particulate additive is comprised between 1 and 10000 microns.
19. (New) The wellbore fluid of claim 1 wherein the additive comprises terpene-based components.

20. (New) The wellbore fluid of claim 19 wherein the additive comprises Borneol or Camphor.

21. (New) A wellbore service fluid to be injected from a surface location through a well tubular into a subterranean formation, said fluid being water based and comprising a particulate additive having the properties of being crystalline, soluble in hydrocarbons and insoluble in an aqueous solution, said additive comprising iodine.